



Contact

Tony Fredriksson
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Skills

Embedded real-time systems
Hardware-related software development
Agile development methods
Software design
C/C++-programming
DSPs and tools

Education

Bachelor of Science in electronics engineering, Umeå 2000.

Language

Swedish, native language.
English, fluently.

Driving license

B, BE, C, CE

Tony Fredriksson

Tony is an embedded software engineer with a demonstrated history of working in the telecommunication and technology industries. He has a solid background with embedded real-time systems, software design and agile working methods.

His work is characterized by accuracy and structure with strengths in making relevant priorities and time estimates.

Tony is a true team player, he is supportive, unprestigious and cherishes a good team spirit with his colleagues. He strives to share his experiences and exchange ideas and learn from others.

Workplaces/Assignments

Konftel AB, Umeå, Sverige

2011 – Present

Embedded Software Developer, permanent employment.

Software development of conference phones with the following areas of responsibility and work tasks:

- Software design work, implementation, and optimization (memory and cycles).
- Test development and code reviews for software quality assurance.
- Documentation of software design and external protocols.
- Participation in prototyping and review of PCB design.
- Board bring-ups.
- Production test development.

His main responsibility regarding software development has been focused on designing and writing platform code and device drivers for variants of Analog Devices DSPs to control external modules and interfaces.

Besides development work within the team, he also took the role as Scrum master in latest internal project. Within this project, agile methodologies were implemented and included cross-functional teams located in three different countries. His work included implementing features of the main application running on an ARM processor with embedded Linux as operating system, customized and built using Yocto.

He was also responsible for DECT and GSM/LTE products and besides development and maintenance work of these, he communicated and requested improvements about interoperability to the suppliers of the modules (RTX and Telit).

Technologies: Analog Devices DSPs (SHARC ADSP-21584, ADSP-21489, Blackfin ADSP-BF524/532), Texas ARM AM4376 Sitara, Linux, OpenEmbedded, Yocto, Qt, Scrum, SIP, DECT, Misra, C/C++, Python.

Tools: Analog Devices CCES, VisualDSP++, Bamboo, Jira, Crucible, Git, SVN.

I/O Protocol: I2S, UART, I2C, USB, S/PDIF.

Cybercom Group, Gothenburg, Sweden

2010 – 2011

Embedded Software Developer, as a consultant for RealtimeDSP AB.

Software development and optimizing a communication stack built upon SRIO on a multicore platform in Ericsson radio base station.

Development done in mixed C/C++ code base.

Technologies: Serial Rapid I/O, Texas Instruments DSPs (curie, faraday).

Tools: Code Composer Studio, ClearCase.

Ascom AB, Gothenburg, Sweden Embedded Software Developer, as a consultant for RealtimeDSP AB. Software development of WLAN-phone based on OMAP1710. Most time of the assignment consisted of implementing drivers for SDIO and other interfaces on the OMAP1710, but also GUI and production test development. The assignment included a visit to the production line in China and optimization of the production tests in this. Development done in mixed C/C++ code base. Part of the assignment also consisted of maintenance work on the existing product portfolio in the form of WLAN- and DECT-phones. Technologies: OMAP1710, SDIO, C/C++, CVS, WLAN, DECT.	2009 – 2010
Ericsson AB, Gothenburg, Sweden Software Designer, permanent employment. A work aimed at software development on the baseband parts of Ericsson's radio base stations. Mainly working in various projects for which functionality of HSDPA (High Speed Downlink Packet Access) were developed. The technology that was developed had very strict real-time and quality requirements. This meant that a lot of work was put into testing (unit, blackbox), code reviews, measurement of code coverage and the use of static code analysis tools, such as lint and coverity. The software that was developed was "object-oriented" C code described and documented using UML. Also worked in sub-projects in which software components were evaluated with the Rhapsody modeling tool. Technologies: WCDMA, HSDPA, Texas Instruments DSPs, OSE RTOS, C, Assembler, UML. Tools: Code Composer Studio, ClearCase, Rhapsody.	2002 – 2008
Ericsson Mobile Data Design AB, Gothenburg, Sweden Software Designer, permanent employment. Software development of WLAN products based on HiperLAN/2 and IEEE 802.11a standards. The work consisted of software design and C programming for ARM processors with OSE epsilon as RTOS. Technologies: HiperLAN2, IEEE 802.11a, ARM9, C, UML. Tools: CodeWarrior, Visual Studio, ClearCase.	2000 - 2002
<u>Professional Courses (selection)</u>	
AVAYA, Umeå, Sweden AIM – Avaya Innovation Model (Agile/Scrum course), 3 days.	2019
Analog Devices, Edinburgh, Scotland SHARCXI Customer Training, 2 days.	2016
IP-Solutions, Stockholm, Sweden SIP Advanced, 3 days. SIP Fundamentals, 2 days	2015
Telelogic, Gothenburg, Sweden Rhapsody Tool Training for SW Engineers, 4 days.	2006
Enea, Gothenburg, Sweden ISEB Software Testing Foundation Course Certification, 3 days.	2006
Texas Instruments, Stockholm, Sweden TMS320C6000 DSP Optimization Workshop, 3 days.	2004
Analog Devices, Gothenburg, Sweden System Design and Programming with The TigerSHARC Family, 3 days.	2003
ARM, Los Gatos, CA, USA ARM System Design, 4 days.	2001